

10/527562

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Appl. No: 10/527,562

**AMENDMENTS TO THE CLAIMS WITH MARKINGS TO SHOW CHANGES MADE,
AND LISTING OF ALL CLAIMS WITH PROPER IDENTIFIERS**

Claims 1-19 (Canceled)

20. (Currently amended) A metallic tube portion for a tube coil, comprising ~~produced from a single-piece tube, for a tube coil, which tube portion includes~~ having at least two tube bends, wherein the tube portion ~~consists~~ is made of one ~~of the a~~ DIN EN 10027 part 1 materials material selected from the group consisting of GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25, GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4, GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW, GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25, GX55NiCrWZr33-30-04.
21. (Currently amended) The tube portion as claimed in claim 20, ~~characterized in that~~ wherein the tube has opposite ends and includes longitudinal axis of individual subsections ~~of the tube portion between the ends, wherein the~~ subsections define a longitudinal axis which does not run extends in more than one plane between the two ends of the tube portion.
22. (Currently amended) The tube portion as claimed in claim 20, ~~characterized in that~~ wherein the tube bends are each defined by a bending radius and a tube diameter at a the ratio of bending radius to tube diameter of a tube bend which ratio, at least in sections, is less than 1.5.
23. (Currently amended) The tube portion as claimed in claim 22, ~~characterized in that~~ wherein the ratio of bending radius to tube diameter ~~of a tube bend, at least in sections, is less than 1.1, in particular less than or equal to 1.04.~~

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24. (Currently amended) The tube portion as claimed in claim 20, ~~characterized in that wherein the intermediate length between two tube bends are spaced by an intermediate length of~~ is less than 300 mm.
25. (Currently amended) The tube portion as claimed in claim 24, ~~characterized in that wherein the intermediate length between two the tube bends is less than or equal to 40 mm.~~
26. (Currently amended) The tube portion as claimed in claim 20, ~~characterized in that wherein the tube portion~~ has a substantially constant wall thickness.
27. (Currently amended) The tube portion as claimed in claim 26, ~~characterized in that wherein the wall thickness of the entire tube portion is between 6 mm and 14 mm.~~
28. (Currently amended) The tube portion as claimed in claim 20, ~~characterized in that wherein the tube has an the inner surface of the tube portion which,~~ at least in sections, has a roughness of less than 12 R_a .
29. (Currently amended) The tube portion as claimed in claim 28~~characterized in that wherein the inner surface of the tube portion, at least in sections, has a roughness of less than 3.2 R_a .~~
30. (Currently amended) A tube coil for a chemical plant, ~~which is assembled from tubes connected to one another by at least one tube portion, characterized by comprising plural tubes; and at least one tube portion as claimed in claim 20 connected to one end of one of the tubes at least at one of its ends, said tube portion including a single-piece tube having at least two tube bends, wherein the tube is made of a DIN EN 10027 part 1 material selected from the group consisting of GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25,~~

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GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4, GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW, GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25, GX55NiCrWZr33-30-04.

31. (Currently amended) The tube coil as claimed in claim 30, ~~characterized in that~~ wherein the tube portion, at least at one of its the ends, is connected to a tube or tube portions ~~which is/are~~ produced from the a same material.
32. (Currently amended) A process for producing a tube portion ~~as claimed in claim 20, characterized in that the tube portion is produced,~~ comprising the step of making the tube portion from a centrifugally cast tube.
33. (Currently amended) The process as claimed in claim 32, ~~characterized in that~~ further comprising the step of shaping the centrifugally cast tube ~~is deformed by~~ inductive bending.
34. (Currently amended) The process as claimed in claim 33, ~~characterized in that~~ further comprising the step of heat treating the centrifugally cast tube ~~is heat-treated prior to the inductive bending step~~.
35. (Currently amended) The process as claimed in claim 34, ~~characterized in that~~ further comprising the step of heat treating the centrifugally cast tube ~~is subjected to a heat treatment at a temperature of 800°C to 1200°C prior to the inductive bending operation step~~.
36. (Currently amended) A process for producing a tube coil ~~as claimed in claim 31,~~ characterized in that, comprising the step of the making a tube portion is ~~produced from a centrifugally cast tube.~~

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37. (Currently amended) The process as claimed in claim 36, ~~characterized in that~~ further comprising the step of shaping the centrifugally cast tube ~~is deformed by~~ inductive bending.
38. (Currently amended) The process as claimed in claim 37, ~~characterized in that~~ further comprising the step of heat treating the centrifugally cast tube ~~is heat-treated~~ prior to the inductive bending step.
39. (Currently amended) The process as claimed in claim 38, ~~characterized in that~~ further comprising the step of heat treating the centrifugally cast tube ~~is subjected to a heat treatment~~ at a temperature of 800°C to 1200°C prior to the inductive bending operation step.
40. (Currently amended) Fitting substitute for a tube coil with fittings, ~~characterized by comprising~~ a metallic tube portion as claimed in claim 20 including a single-piece tube having at least two tube bends, wherein the tube is made of a DIN EN 10027 part 1 material selected from the group consisting of GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25, GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4, GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW, GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25, GX55NiCrWZr33-30-04.
41. (Currently amended) Cracker with a metallic tube portion ~~as claimed in claim 20~~ including a single-piece tube having at least two tube bends, wherein the tube is made of a DIN EN 10027 part 1 material selected from the group consisting of GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25, GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4, GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW, GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25, GX55NiCrWZr33-30-04.

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42. (Currently amended) Cracker with a tube coil ~~as claimed in claim 30~~ having plural tubes; and at least one tube portion connected to one end of one of the tubes, said tube portion including a single-piece tube having at least two tube bends, wherein the tube is made of a DIN EN 10027 part 1 material selected from the group consisting of GX40CrNiSi25-20, GX40NiCrSiNb35-25, GX45NiCrSiNbTi35-25, GX35CrNiSiNb24-24, GX45NiCrSi35-25, GX43NiCrWSi35-25-4, GX10NiCrNb32-20, GX50CrNiSi30-30, G-NiCr28W, G-NiCrCoW, GX45NiCrSiNb45-35, GX13NiCrNb45-35, GX13NiCrNb37-25, GX55NiCrWZr33-30-04.
43. (New) The tube portion as claimed in claim 22, wherein the ratio of bending radius to tube diameter, at least in sections, is less than or equal to 1.04.